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SEQUENCE LISTING

<110> Chermesh, Chen
      Walach , Shira
      Rotman , Galit
      Sella-Tavor, Osnat

<120> SIM2 POLYPEPTIDES AND POLYNUCLEOTIDES ENCODING SAME AND USES
      THEREOF IN DIAGNOSIS AND TREATMENT OF OVARIAN, BREAST AND LUNG
      CANCERS

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ttccaagtgg acggcagacc tgggaggga cgcctgtgtc acgagccctt ttagatgctt    2520

aggtgaaggc agaagtgatg attgtaagtc ccatgaatac acaactccac tgtctttaaa   2580

agtcattcaa gagtctcatt attttgttt ttatttaacc ctttcttcaa tacaaaaagc     2640

caacaaacca agactaaggg ggtgaccatg caattccatt ttgtgtctgt gaacataggt   2700

gtgcttccca aatacattaa caagctctta cttcccccta accctatga actcttgata    2760

acaccaagag tagcaccttc agaatatatt gaataggcat taaatgcaaa aatatatatg   2820

tagccagaca gtttatgaga atgaccctgt caagcttcat tattacgtgg caaaatccct   2880

ctggcccaca cagatctgta attcactagg ctcgtgtttg ctacaaatag tgctaataaa   2940

gttaaattgc acgtgcaata cggaacactg tcaatggact gcaccttgtg aaggaaaaac   3000

atgcttaagg gggtgtaatg aaaatgatgt agacatttta agcattttct acacagcgag   3060

aaaacttcgt aagaacatgt tacgtgtgca acaggtaaac agaaatcctt tcataaagca   3120

ccagcagtgt ttaaaaaatg agcttccatt aattttact ttttatgggt tttgcttaaa     3180

gatctcaaca tggaaaaatc ctgtcatggc tctgaactgc acaatgcatt gaaccgccgt   3240

ccttcaattt tcttcacact atcaacactg cagcattttg ctgctttatc aaaatggttt   3300

attttaggaa acttttttcca cctttctgaa tggaagagg ttttcacaaa tgtttaaac     3360

tcatcgttct aaaatcaagt gcacctacac caactgctct caaaatgtga actgactttt   3420

ttttttttt ttttgccaac cctgtgtcac ttagtgagga cctgacacaa tccctacagg   3480

gtgtctgtca gtgggcctca tggtaagagt cacaatttgc aaatttagga ccgtgggtca   3540
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```
tgcagcgaag gggctggatg gtaggaaggg atgtgcccgc ctctccacgc actcagctat      3600

acctcattca cagctccttg tgagtgtgtg cacaggaaat aagccgaggg tattattttt      3660

ttatgttcat gagtcttgta attaaaccgt gattcttgaa aggtgtaggt ttgattacta      3720

ggagatacca ccgacatttt tcaataaagt actgcaaaat gcttttgtgt ctaccttgtt      3780

attaactttt ggggctgtat ttagtaaaaa taaatcaagg ctatcggagc agttcaataa      3840

caaaggttac tgttgagaaa aaagacccta tcatagattt acaag                      3885
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<210>    8
<211>    2823
<212>    DNA
<213>    Homo sapiens

<400>    8
ggggctccgc gggcctggag cacggccggg tctaatatgc ccggagccga ggcgcgatga        60

aggagaagtc caagaatgcg gccaagacca ggagggagaa ggaaaatggc gagttttacg       120

agcttgccaa gctgctcccg ctgccgtcgg ccatcacttc gcagctggac aaagcgtcca       180

tcatccgcct caccacgagc tacctgaaga tgcgcgccgt cttccccgaa ggtttaggag       240

acgcgtgggg acagccgagc cgcgccgggc ccctggacgg cgtcgccaag gagctgggat       300

cgcacttgct gcagactttg gatggatttg tttttgtggt agcatctgat ggcaaaatca       360

tgtatatatc cgagaccgct tctgtccatt taggcttatc ccaggtggag ctcacgggca       420

acagtattta tgaatacatc catccttctg accacgatga gatgaccgct gtcctcacgg       480

cccaccagcc gctgcaccac cacctgctcc aagagtatga gatagagagg tcgttctttc       540

ttcgaatgaa atgtgtcttg gcgaaaagga acgcgggcct gacctgcagc ggatacaagg       600

tcatccactg cagtggctac ttgaagatca ggcagtatat gctggacatg tccctgtacg       660

actcctgcta ccagattgtg gggctggtgg ccgtgggcca gtcgctgcca cccagtgcca       720

tcaccgagat caagctgtac agtaacatgt tcatgttcag ggccagcctt gacctgaagc       780

tgatattcct ggattccagg gtgaccgagg tgacgggtta cgagccgcag gacctgatcg       840

agaagaccct ataccatcac gtgcacggct gcgacgtgtt ccacctccgc tacgcacacc       900

acctcctgtt ggtgaagggc caggtcacca ccaagtacta ccggctgctg tccaagcggg       960

gcggctgggt gtgggtgcag agctacgcca ccgtggtgca acagccgc tcgtcccggc        1020

cccactgcat cgtgagtgtc aattatgtac tcacggagat tgaatacaag gaacttcagc      1080

tgtccctgga gcaggtgtcc actgccaagt cccaggactc ctggaggacc gccttgtcta      1140

cctcacaaga aactaggaaa ttagtgaaac ccaaaaatac caagatgaag acaaagctga      1200

gaacaaaccc ttacccccca cagcaataca gctcattcca aatggacaaa ctggaatgcg      1260

gccagctcgg aaactggaga gccagtcccc ctgcaagcgc tgctgctcct ccagaactgc      1320

agccccactc agaaagcagt gaccttctgt acacgccatc ctacagcctg cccttctcct      1380

accattatgg acacttccct ctggactctc acttcttcag cagcaaaaag ccaatgttgc      1440
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cggccaagtt cgggcagccc caaggatccc cttgtgaggt ggcacgcttt ttcctgagca      1500

caatgccagc cagcggtgaa tgccagtggc attatgccaa cccctagtg cctagcagct        1560

cgtctccagc taaaaatcct ccagagccac cggcgaacac tgctaggcac agcctggtgc       1620

caagctacga aggtgggtca ggtctgctcg tggggaaggt gggaggactg cgcacggccg       1680

ggagccgaag cagccatggc ggtgggtggc agatggagac agaaccctca cgctttgggc       1740

aaacttgccc tctttctgct tctaagtagg gcttgctgtg ctttcttgct ctcaatgcag       1800

gtgctcctcg agagtgagaa atggcagtct gcctgcctcg gggacactag tgacagtata       1860

aagggcaaag gaaaaccgag tatctggcct tcacgtaaat cctggccaca ttcaccaacc       1920

aaaggggac agtgattttc aaaaccagct cccatgtgct gagaacaccc cagctgcatt        1980

tcttttgcaa gattcctttc cactccaacc agaagtgaat atttgagaca aacggcctat       2040

tggctatttt cccatgccag ttttggaagt ggggaaaact atggtggaaa tttgtgggct       2100

tggggacaga aatgccactc accaacccag ggcaaagaac acaaaccctc caggcctcag       2160

tttcttcacc tgtaaaatgg ggtgaagctg tgatgtgcct actcccaagg acacgacaca       2220

cagtagggac ctgccctgta catgctagtt caacagaaag gaatggcctt tcaccttctc       2280

ctggtggcag gcaagcagat gtcctctgcg gagataccgc cagctcccca ggacgcagac       2340

tgactcctgt ttgctcgctg gaccaacccc aggcagaagg tggaaggtgg aacagaggt       2400

ttagctgcag gacatgtatt cccattgcac cgagacctaa ctgccgctca gagtgtagac       2460

cgagatggtg cagatgcctg cagtgccatt aaaatgtggg tgaaggtgac atcaggatta       2520

tgtgccccag gccgggctca gtggctcaca cctgtaatcc cagcactttg ggaggccaag       2580

gtgggcggat cacctgaggt caggagtttg cgacaagcct gccaacaagc tgaaacccca       2640

tctccactaa aaatacaaaa attagttggg catggtggtg agcacctgta atcccagcta       2700

ctctggaggc tgagatagga ggatcacttg aacccgggag gtggaggttg cagtgagcta       2760

agatcacatc actgcactcc agcctgggta acagagtgag actgtctcaa aaaaaaaaa       2820

aaa                                                                    2823
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<210>  9
<211>  99
<212>  DNA
<213>  Artificial sequence

<220>
<223>  Real time PCR amplicon

<400>  9
aggagctggg atcgcacttg ctgcagactt tggatggatt tgtttttgtg gtagcatctg        60

atggcaaaat catgtatata tccgagaccg cttctgtcc                              99


<210>  10
<211>  19
<212>  DNA
<213>  Artificial sequence
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<220>
<223> Single strand DNA oligonucleotide

<400> 10
ggagctggga tcgcacttg   19

<210> 11
<211> 21
<212> DNA
<213> Artificial sequence

<220>
<223> Single strand DNA oligonucleotide

<400> 11
ggacagaagc ggtctcggat a   21

<210> 12
<211> 23
<212> DNA
<213> Artificial sequence

<220>
<223> Single strand DNA oligonucleotide

<400> 12
tttacaacat aaagcgcatg gtg   23

<210> 13
<211> 22
<212> DNA
<213> Artificial sequence

<220>
<223> Single strand DNA oligonucleotide

<400> 13
gtggctactt gaagatcagg ca   22

<210> 14
<211> 20
<212> DNA
<213> Artificial sequence

<220>
<223> Single strand DNA oligonucleotide

<400> 14
cctagcagct cgtctccagc   20

<210> 15
<211> 18
<212> DNA
<213> Artificial sequence

<220>
<223> Single strand DNA oligonucleotide

<400> 15
ggtgtcctcg ccgaacct   18

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<210>  16
<211>  21
<212>  DNA
<213>  Artificial sequence

<220>
<223>  Single strand DNA oligonucleotide

<400>  16
tagggacctg ccctgtacat g                                                 21


<210>  17
<211>  17
<212>  DNA
<213>  Artificial sequence

<220>
<223>  Single strand DNA oligonucleotide

<400>  17
gctggcggta tctccgc                                                      17


<210>  18
<211>  120
<212>  DNA
<213>  Artificial sequence

<220>
<223>  Real time PCR amplicon

<400>  18
cctagcagct cgtctccagc taaaaatcct ccagagccac cggcgaacac tgctaggcac    60

agcctggtgc caagctacga agcgcccgcc gccgccgtgc gcaggttcgg cgaggacacc   120


<210>  19
<211>  101
<212>  DNA
<213>  Artificial sequence

<220>
<223>  Real time PCR amplicon

<400>  19
tagggacctg ccctgtacat gctagttcaa cagaaaggaa tggcctttca ccttctcctg    60

gtggcaggca agcagatgtc ctctgcggag ataccgccag c                        101


<210>  20
<211>  101
<212>  DNA
<213>  Artificial sequence

<220>
<223>  Real time PCR amplicon

<400>  20
tgggtgtgtt gcaagtttca tactcctaca tattataagt gacactaata tcagggacaa    60

ctaagtgctg gggaacttca atgaaaacct ggctggtaaa g                        101
```

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<210>   21
<211>   20
<212>   DNA
<213>   Artificial sequence

<220>
<223>   Single strand DNA oligonucleotide

<400>   21
ctggcaagca gctggaagat                                              20


<210>   22
<211>   23
<212>   DNA
<213>   Artificial sequence

<220>
<223>   Single strand DNA oligonucleotide

<400>   22
tttcttagca ccaccacgaa gtc                                          23


<210>   23
<211>   101
<212>   DNA
<213>   Artificial sequence

<220>
<223>   Real time PCR amplicon

<400>   23
ctggcaagca gctggaagat ggacgtactt tgtctgacta caatattcaa aaggagtcta   60

ctcttcatct tgtgttgaga cttcgtggtg gtgctaagaa a                      101


<210>   24
<211>   25
<212>   DNA
<213>   Artificial sequence

<220>
<223>   Single strand DNA oligonucleotide

<400>   24
cagtgattat aggctttcgc tctaa                                        25


<210>   25
<211>   23
<212>   DNA
<213>   Artificial sequence

<220>
<223>   Single strand DNA oligonucleotide

<400>   25
cagggctatt ggttgaatga gta                                          23


<210>   26
<211>   134
<212>   DNA
<213>   Artificial sequence
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<220>
<223> Real time PCR amplicon

<400> 26
cagtgattat aggctttcgc tctaagatta aaaatgccct agcccacttc ttaccacaag   60

gcacacctac accccttatc cccatactag ttattatcga aaccatcagc ctactcattc   120

aaccaatagc cctg   134

<210> 27
<211> 20
<212> DNA
<213> Artificial sequence

<220>
<223> Single strand DNA oligonucleotide

<400> 27
gtaacccgtt gaaccccatt   20

<210> 28
<211> 20
<212> DNA
<213> Artificial sequence

<220>
<223> Single strand DNA oligonucleotide

<400> 28
ccatccaatc ggtagtagcg   20

<210> 29
<211> 151
<212> DNA
<213> Artificial sequence

<220>
<223> Real time PCR amplicon

<400> 29
gtaacccgtt gaaccccatt cgtgatgggg atcggggatt gcaattattc cccatgaacg   60

aggaattccc agtaagtgcg ggtcataagc ttgcgttgat taagtccctg ccctttgtac   120

acaccgcccg tcgctactac cgattggatg g   151

<210> 30
<211> 19
<212> DNA
<213> Artificial sequence

<220>
<223> Single strand DNA oligonucleotide

<400> 30
tgagagtgat tcgcgtggg   19

<210> 31
<211> 21
<212> DNA
<213> Artificial sequence

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<220>
<223>  Single strand DNA oligonucleotide

<400>  31
ccagggtacg aggctttcaa t                                          21


<210>  32
<211>  91
<212>  DNA
<213>  Artificial sequence

<220>
<223>  Real time PCR amplicon

<400>  32
tgagagtgat tcgcgtgggt acccgcaaga gccagcttgc tcgcatacag acggacagtg    60

tggtggcaac attgaaagcc tcgtaccctg g                                91


<210>  33
<211>  21
<212>  DNA
<213>  Artificial sequence

<220>
<223>  Single strand DNA oligonucleotide

<400>  33
tgacactggc aaaacaatgc a                                          21


<210>  34
<211>  21
<212>  DNA
<213>  Artificial sequence

<220>
<223>  Single strand DNA oligonucleotide

<400>  34
ggtccttttc accagcaagc t                                          21


<210>  35
<211>  94
<212>  DNA
<213>  Artificial sequence

<220>
<223>  Real time PCR amplicon

<400>  35
tgacactggc aaaacaatgc agactttgct ttccttggtc aggcagtata atccaaagat    60

ggtcaaggtc gcaagcttgc tggtgaaaag gacc                            94


<210>  36
<211>  20
<212>  DNA
<213>  Artificial sequence

<220>
<223>  Single strand DNA oligonucleotide
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<400> 36
tgggaacaag agggcatctg   20

<210> 37
<211> 22
<212> DNA
<213> Artificial sequence

<220>
<223> Single strand DNA oligonucleotide

<400> 37
ccaccactgc atcaaattca tg   22

<210> 38
<211> 86
<212> DNA
<213> Artificial sequence

<220>
<223> Real time PCR amplicon

<400> 38
tgggaacaag agggcatctg ctaaagtttc agattccatt tctgctcagt atccagtagt   60

ggatcatgaa tttgatgcag tggtgg   86

<210> 39
<211> 160
<212> PRT
<213> Homo sapiens

<400> 39

Leu Asp Gly Phe Val Phe Val Val Ala Ser Asp Gly Lys Ile Met Tyr
1   5   10   15

Ile Ser Glu Thr Ala Ser Val His Leu Gly Leu Ser Gln Val Glu Leu
            20   25   30

Thr Gly Asn Ser Ile Tyr Glu Tyr Ile His Pro Ser Asp His Asp Glu
        35   40   45

Met Thr Ala Val Leu Thr Ala His Gln Pro Leu His His His Leu Leu
    50   55   60

Gln Glu Tyr Glu Ile Glu Arg Ser Phe Phe Leu Arg Met Lys Cys Val
65   70   75   80

Leu Ala Lys Arg Asn Ala Gly Leu Thr Cys Ser Gly Tyr Lys Val Ile
                85   90   95

His Cys Ser Gly Tyr Leu Lys Ile Arg Gln Tyr Met Leu Asp Met Ser
            100   105   110

Leu Tyr Asp Ser Cys Tyr Gln Ile Val Gly Leu Val Ala Val Gly Gln

115   120   125

Ser Leu Pro Pro Ser Ala Ile Thr Glu Ile Lys Leu Tyr Ser Asn Met
    130   135   140

Phe Met Phe Arg Ala Ser Leu·Asp Leu Lys Leu Ile Phe Leu Asp Ser
145   150   155   160

<210> 40
<211> 178
<212> PRT
<213> Homo sapiens

<400> 40

Met Lys Glu Lys Ser Lys Asn Ala Ala Lys Thr Arg Arg Glu Lys Glu
1   5   10   15

Asn Gly Glu Phe Tyr Glu Leu Ala Lys Leu Leu Pro Leu Pro Ser Ala
            20   25   30

Ile Thr Ser Gln Leu Asp Lys Ala Ser Ile Ile Arg Leu Thr Thr Ser
        35   40   45

Tyr Leu Lys Met Arg Ala Val Phe Pro Glu Gly Glu Ala Ser Gly Gly
    50   55   60

Arg Pro Gly Thr Leu Gly Ser Pro Ala Ala Pro Ala Gln Ala Gly Ser
65   70   75   80

Ala Ser Gln Pro Ala Gln Arg Gly Cys Arg Gly Leu Ala Ser Arg Ala
            85   90   95

Gly Ala Ser Glu Gly Gly Cys Val Arg Val Phe Gly Phe Gly Ala Gly
            100   105   110

Leu Gly Arg Gly Ala Arg Ala Leu Ala Ala Gln Ala Thr Lys Pro Ser
        115   120   125

Pro Gly Pro Gly Leu Gly Glu Gly Glu Leu Arg Ile Val Pro Gly Ala
    130   135   140

Gly Ser Pro Pro Ala Arg Thr Ala Ser Glu Arg Cys Glu Ser Ala Gly
145   150   155   160

Ile Thr Val Arg Pro Lys His Cys Arg Leu Arg Pro Gln Ser Glu His
            165   170   175

Leu Cys

<210> 41

<211> 584
<212> PRT
<213> Homo sapiens

<400> 41

Met Arg Arg Trp Leu Pro Phe Pro Pro Phe Leu Pro Gly Gly Pro Ser
1   5   10   15

Asn Leu Ala Ile Pro Asp Phe Gln Gln His Ser Val Pro Thr Gly Pro
            20   25   30

Ala Val Leu Cys Arg Gly Ala Gly Ser Ser Pro Pro Pro Ser Arg Asn
        35   40   45

Leu Thr Phe Leu Thr Pro Thr Pro Pro Ala Gly Asn His Arg Leu Gly
    50   55   60

Trp Gly Pro Leu Val Leu Gln Glu Ser Ser Ala Asp Phe Ser Pro Ser
65   70   75   80

Leu Pro Ala Met Gly Phe Ala Arg Ser Gln Gly Pro Glu Ala Thr Leu
            85   90   95

Thr Val Asn Thr Ala Gln Gly Lys Gly Gly Ser Arg Thr Thr Ala Gln
            100   105   110

Pro Gln Glu Arg Pro Ser Ser Arg Glu Lys Asp Ser Cys Gln Gly Ala
        115   120   125

Phe Val Pro Arg Pro Ser Tyr Pro Ala Leu Pro Gly Gly Ser Cys Leu
    130   135   140

Trp Phe Ser Ala Arg Gly Thr Thr Ala Leu Arg Thr Ala Val Gly Gly
145   150   155   160

Trp Gly Trp Gly Trp Ala Trp Pro Ser Val Gly Trp Gly Gly Gly Arg
            165   170   175

Ala Ser Ser Ala Arg Ser Ser Leu Arg Arg Gly Arg Ser Gln Gly Ser
            180   185   190

Gly Ala Arg Leu Val Gly Arg Glu Thr Pro Gly Ala Leu Ser Ser Gly
        195   200   205

Glu Val Gly Val Gln Ala Gly Lys Pro Gly Val Ser Arg Gly Ala Ala
    210   215   220

Val Arg Ser Arg Val Gln Gln Glu Gly Ser Pro Asp Gly Gln Val Pro
225   230   235   240

Leu Ser Pro Gly Ala Gln His Trp Leu Val Ala Phe Ala Glu Val Val

245   250   255

Lys Lys Gly Arg Arg Pro Val Glu Arg Arg Ser Pro Gly Ile Pro Asn
        260   265   270

Tyr Val Thr Gly Asp Pro Phe Gln Phe Gly Leu Trp Pro Ile Pro Leu
        275   280   285

Ser Pro Pro Ala Asp Trp Ser Leu Leu Ser Gly Ser Pro Gln Pro Phe
    290   295   300

Leu Phe Asn Arg Gly Gln Arg Gly Asp Gly Glu Ser Thr Asp Gly Gly
305   310   315   320

Cys Gly Ala Gly Glu Ala Ala Gly Arg Arg Ala Gly Leu Val Gly Arg
            325   330   335

Ala Gly Arg Val Gln Gly Phe Arg Val Thr Cys Pro Ala Pro Arg His
            340   345   350

Arg Ala Gly Arg Cys Ser Leu Pro Ile Cys Phe Arg Pro Ser Ser Arg
        355   360   365

Phe Arg Arg Arg Val Gly Thr Ala Glu Pro Arg Arg Ala Pro Gly Arg
    370   375   380

Arg Arg Gln Gly Ala Gly Ile Ala Leu Ala Ala Gly Arg Ala Ala Ser
385   390   395   400

Pro Gly Glu Glu Arg Ser Arg Arg Arg Leu Pro Ser His Pro Ala Thr
            405   410   415

Pro Ala Ser Arg Arg Pro Phe Pro Arg Ser Ala Arg Gln Ile Gln Arg
            420   425   430

Leu Pro Gly Ala Gly Asp Gly Val Val Pro Thr Ala Glu Gly Trp Thr
        435   440   445

Leu Ser Met Ser Asp Ala Ala Cys Gly Gln Pro Tyr Pro Asn Pro Thr
    450   455   460

Ala His Pro Asp Asn Gln Asn Leu Val Arg Pro Pro Gly Ser Cys Leu
465   470   475   480

Val Trp Ser Gln Val Leu Ser Ala Pro Ser Pro Gly Pro Phe Thr Leu
            485   490   495

Gln Glu Leu His Ala Pro Leu Thr Ser Ala Phe Pro Trp Gln Gln Arg
        500   505   510

Gly Phe Ala Gly Arg Pro Gly Ser Pro Glu His Ser Ser Pro Leu Pro
        515   520   525

Gly Gly Leu Leu Ala Leu Ala Gly Asp Thr Ser Arg Ser Phe Lys Cys
    530   535   540

Pro Leu Gln Ser Leu Ile Asn Asp Pro Ile His Ser Pro Leu Leu Ser
545   550   555   560

Phe Val Ser Ala Ile Glu Lys Cys Leu Pro Arg Ala Ala Leu His Phe
                565   570   575

Arg Pro Leu Phe Cys Val Leu Leu
        580